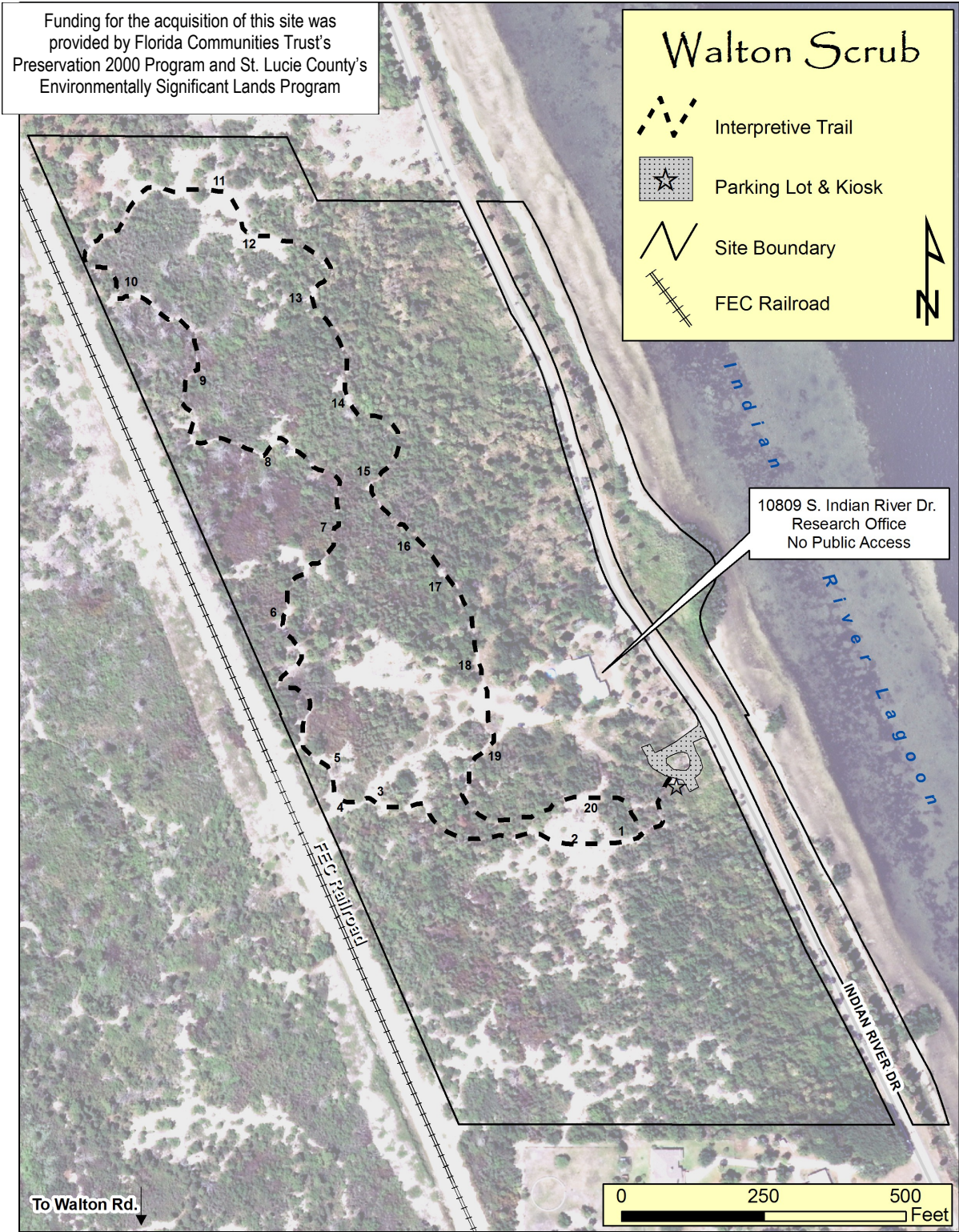


20) Gopher Tortoise - *Gopherus polyphemus* -
Look around, see the sandy patches before you, these are the aprons—or exit of Gopher Tortoise burrows. The gopher tortoise is a threatened species due to its selection of habitat. The high and dry conditions found in scrub is ideal for development. This tortoise is one of three species that resides in the US. The adults are a very dark brown color often reaching 15 inches in length. They have shovel like front legs used for digging their burrows, which can reach 40 feet in length and 10 feet in depth. The gopher tortoise is known as a key-stone species, due to the number of other animal species that depend on their burrows for shelter. It is estimated that 360 animals species depend on the burrows for shelter and habitat. Mating occurs in April through June, adult females can lay 3 to 15 eggs, eggs in Florida have a 80-90 day gestation period. Like most reptiles, the temperature of the egg determines whether the embryo will form a male or female.

Guidelines and Safety Information:

- Be cautious of uneven trail surfaces.
- Please remain on the trails.
- Carry adequate drinking water.
- In case of lightning, seek a low area away from trees, fence lines and tall objects.
- In case of emergency, call 911.
- While hiking the trail you may encounter animals indigenous to this area, including a **rattlesnake**. Please observe from a safe distance.
- Leave all plant life intact.
- Please leave site cleaner than you found it. **“Pack it in, pack it out.”**
- Caution many plants in the Scrub have thorns!
- **Use at own risk.**

To learn more about St. Lucie County’s natural heritage, there are more than 20 self-guiding interpretive trails located within the Natural Areas/Preserves. Each trail describes the most common plants, as well as significant geographical and historical features of the site.



Walton Scrub

Interpretive Trail

St. Lucie County
Environmental Resources
Department
2300 Virginia Avenue
Ft. Pierce, FL 34982

772-462-2525

http://www.stlucieco.gov/erd/environmental_lands.htm
Site Open: Sunrise to Sunset

1) Scrub - Scrub is a very harsh environment for plants and animals. The deep, porous sand of the ridge makes it difficult for plants to obtain water and nutrients. Plants and animals of the scrub have adapted several mechanisms to survive here. In fact many plants here rely on a specialized fungi found in the soils that provides the plant's root system with necessary nutrients. For this reason plants from the scrub don't trans-plant well and should not be removed. Scrub is endangered habitat in Florida due to its high in dry value to developers, therefore many plant and animals found here are endangered. This half mile trail will identify some of these special plants and animals.

2) Palafoxia - *Palafoxia feayi* - An herb, stems erect grows 5-7 feet; with leaves linear one to three inches long. Flowers are white or pinkish which produce a fruit. It flowers and fruits in Spring and again in the Fall. Nectar and pollen from the flowers provides food for many insects including bees and wasps.

3) Prostrate Scrub Spurge - *Chamaesyce cumulicola* - Other name: Sand dune spurge. An herb, with leaves elliptic shaped and flower clusters long with petal-like appendages. This is an endangered species and until the late 1970's was thought to inhabit only the Marco Island area on the west coast of Florida. It was found along the eastern coast of the state and is often called a sidewalk crack weed because it tolerates the extremes dryness and heat which makes it ideal for a rock gardens.

4) Railroad & Pineapple Plantations - The railroad before you has been in use since the late 1890's and it is part of the original Henry Flagler Railroad System that funneled people, supplies, and economic commerce to and from South Florida. The railway was destined for tourism sites in South Florida, but when it reached Ft. Pierce it tapped the wealth of citrus and pineapple this area had to offer. If you look behind you, facing the Indian River, every inch of this property was covered by pineapple plantation. It is likely that you could see the river from this point because all the native vegetation was cleared for the pineapple fields. Before the railroad existed, locals would haul crop yields to the river docks and ship the produce up river. The Indian River is very shallow near shore and docks had to span out to deeper waters, so that boats hauling supplies could access them. Some docks were so long that many locals equipped their docks with rail cart systems that included sails. They would then use the wind to drive supplies up and down the docks. Today you can still look out on the waters and see that lengthy docks are still needed. Visit our kiosk for photos taken from the area from this era.

5) Wild Pineapple - *Tillandsia recurvata* & *T. utriculata* - Other names: Wild pine, ball moss, giant wild pine, giant air plant. Of the bromeliad family, these two species have adapted in different ways to survive areas of limited moisture. *Tillandsia recurvata* uses atmospheric moisture by trapping it below a thick layer of star-shaped plant hairs that are spread over its leaves and stems. The *Tillandsia utriculata* on the other hand, captures falling rain water, storing it in its overlapping leaf bases. The water collects, as a form of an aerial cistern, popular for mosquito larvae and tree frogs.

6) Sand Pine - *Pinus clausa* - Sand pine occurs on both the Atlantic and Gulf coastal areas in deep, dry, infertile acid sands. It is a small to medium sized tree with a conical crown. The bark of large trees remains fairly smooth particularly near the top. Trunk and branches of this are frequently twisted. The two needles in each bundle or fascicle are 2 to 4-1/2 inches. The trees' thin needles reduce moisture loss. Many "wetter" species of pine have as many as 5 needles per bundle. This tree has only 2 per bundle to tolerate drought conditions. The shallow root systems can catch rainfall at the surface, before it percolates down to the deep water table. Due to the shallow root systems, the tree is easily blow down.

7) Love Vine - *Cassytha filiformis* - Other names: dodder, old man berry and others. This is a vine with stems usually matted, yellow or green. Flowers are mostly in spikes, white to yellowish in color and fruits are fleshy, turning white when mature and has a single seed. It is a parasitic plant that grows special root-like structures into their hosts and withdraw liquid. It's considered a hemi-parasite (half-parasites) because their stems do have some chlorophyll. Birds and other animals eat the fleshy fruits when it ripens causing the spreading of the plant. Its name refers to a "tangled wisp or hair" referencing to the way the stems twine and twist around each other and their host plants. **May die back during cold winters.**

8) Regeneration of the forest - These trees have died and allowed sunlight and heat to penetrate the sand, germinating the dormant pine cones. The many young seedlings that have resulted, now compete for the limited nutrients and water. Many will die. The one or two to survive will have adapted quicker than the others. **2005 Hurricane Damage.**

9) Scrub Hickory - *Carya floridana* Also called "Florida Hickory", this is the only *Carya* found growing in the white sand scrub of the central peninsula of the state; most hickories are found growing in moist woods or along riverbanks. The underside of the leaves are rusty in color, which is another distinguishing characteristic. Flowers appear in April that later produce a four-angled pear shaped nut.

10) Deer Moss - *Cladonia evansii* spp. - There are a half dozen species of ground lichens, or "reindeer moss" that sometimes carpet the sand in Florida scrubs. A lichen is not a single plant, but actually a combination of a fungus and an alga. Neither the fungus nor the alga can live alone, and the relationship is a type of symbiosis called obligate mutualism. Lichens are extremely slow-growing. Looking like gray puffy ground clouds. Lichens have no roots, obtaining moisture instead from the evening air and the dew. They are brittle and crunchy underfoot when dry, but soft as cotton balls when moist. They are killed by fire and slow to repopulate. The longer a scrub has been without fire, the larger and more numerous are the lichens.

12) Earleaf Greenbrier - *Smilax auriculata* - Common woody-climbing vine found along coastal ridges and many habitats in Florida. Leaves vary in shape, but often elongated and round. Flowers are slightly greenish-yellow and produce grape-like fruits. Fruit is good food source for wildlife and appear blueish-black and mature from September-October. There are 14 known *Smilax* species occurring in throughout Florida, each have thorns and are often difficult to distinguish from one another due to leaf shape variation.

11) Wildlife 'Game' Trail - The sandy path in front of you is a trail readily used by wildlife, look for tracks from raccoons, armadillos, opossums, and even the occasional bobcat. Many species of wildlife are creatures of habit and frequently take the same path daily in search for food. Plants to look for in this area are sandhill wireweed (flowers white in Oct) and pineland's threeawn a brown thin grass used by gopher tortoise as food, look for grassy pellets left behind.

13) Large Flowered Rosemary - *Coradina grandiflora* - A shrub that grows two to four feet, slender, usually with curved branches. Leaves are narrow and flowers are light pink. It flowers in Spring and early Summer, fruiting in Summer and Fall. This species is listed as threatened in Florida. It is restricted to the southeastern part of Florida and because it requires this special habitat, it occurs nowhere else.

14) Tuberous Sword Fern - *Nephrolepis cordifolia* - Is a invasive exotic fern that has escaped from nearby yards and can easily outcompete native groundcovers due to its quick dispersal/growth rate. The common name comes from its upright sword-like stature. This exotic is easy distinguish from the native sword fern by the round tubers found in the roots systems when exposed. Search "invasive exotic plants" online to learn more about plants not to plant at home as they can cause catastrophic damage to your favorite preserve.

15) Live Oak - *Quercus Virginiana* - This tree is characteristic of it's wide spread canopy, sometimes reaching one hundred feet across with a short, stout trunk, up to three to four feet in diameter. The trunk divides in several large limbs with nearly horizontal branches, forms a low, dense, rounded head. It's height can reach up to fifty feet. The bark of the trunk and large branches is dark brown tinged with red, and slightly furrowed. It is moderately slow in growing with a long life span. The leaves are thick, leathery, oblong and smooth, with edges being slightly rolled under; from two to four inches in length. The fruit is an acorn about and inch long.

16) Sand Live Oak - *Quercus geminata* - Has thick leaves with rolled edges. The leaves are dark green, somewhat corrugated on top, and white on the bottom.. They are usually found in dry, well-drained sandy soils that lack organic materials. It shares its habitat with Sand Pine that creates and over-story with Scrub, Chapmans=s and myrtle oak. Other woody plants found may include saw palmetto, rosemary, rusty lyonia, tallowood, hickory and others. The evergreen, thick leaves of many of these plants are probably adaptations to moisture retention, due to living in arid, harsh environment.

17) Wild Coffee - *Psychoria nervosa* - Shrub that grows to ten feet tall with thin branches, leaves are dark green, glossy, oval, pointed, and up to six inches long with prominent veins. Trunk is multi-stemmed, shrub-like with brown bark. The blooms are small white flowers, that appear in clusters during Spring and Summer. The fruits are red oval shaped berries about 1/3 inches long. Roasted seeds have been used as a coffee substitute.

18) Red Bay - *Persea boronia* - Belonging to the evergreen family, this tree has aromatic qualities and typically grows as a large understory tree up to sixty feet. Like other bay trees, the Red Bay is closely related to the Avocado. Leaves alternate from glossy green on top to grayish underneath. Ends are often tapered with flowers that are yellowish green and in clusters. Flowers April through October and December through February. Wood from this tree has been used in cabinets and leaves can be used for teas or flavoring of meats and soups as a substitute of store bought Bay leaves. This tree species is under **serious threat** of extinction by the African Ambrosia Beetle (*Xyleborus galbratus*) that entered the U.S. at Port Worth, GA. in 2002. These beetles spawn mold infestations within the trees systemic system eventually killing them, Often referred to as 'Laurel Wilt.'

19) Tallowood - *Ximenia americana* - Other names: Spanish plum, hog plum, purge nut: Shrub or small tree up to twenty-three feet in height, containing sharp thorns. The fruit is a favorite of the Gopher Tortoise. **Watch for sharp thorns.**